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09/977,896	10/15/2001	Cheol-Woong Lee	042933/253085	3473

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EXAMINER	
POPHAM, JEFFREY D	
ART UNIT	**PAPER NUMBER**
2137	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/977,896	LEE ET AL.	
	Examiner	Art Unit	
	Jeffrey D. Popham	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 November 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Remarks

Claims 1-18 are pending.

Response to Arguments

1. Applicant's arguments filed 11/13/2007 have been fully considered but they are not persuasive.

Applicant argues that Cuckoo does not teach collecting one of a plurality of digital music files which are substantially similar to an illegally produced digital music file that has a greatest number of files having the same name, size, and playing time. First noted is that the claims refer to collecting a file that has "a greatest number of files having the same name, size and playing time" (claim 12). What this "a greatest number" is in reference to is not clear. This greatest number could mean that a particular song is stored on more computers than another song. It could also mean that a certain version of a particular song is offered for download by more computers than another version of that particular song (such as a remix being more popular, and thus stored on more computers than the original). Cuckoo describes that picking more popular songs will maximize demand for the cuckoo eggs (modified media). More popular songs are traded more often and in higher demand than less popular songs. Therefore, such songs will have more of an impact if used within the system to modify such songs and redistribute them. As described in Applicant's specification (page 8, lines 15-18), "The greater the numbers of the music file with a same name, size and playing time, the higher probability of its being reproduced later by another user, due to

its wide distribution through the network to many users." The popularity of certain songs is directly proportional to which songs have "a greatest number of files having the same name, size and playing time".

Applicant argues that Hale fails to teach modifying the collected digital music file and redistributing the modified digital music file. Along with this argument, Applicant notes that Hale is concerned with constructing decoy media. One will note that Hale teaches, in the manufacturing phase, creating degraded versions of proprietary media, in order to be redistributed in the sharing phase. In order to create a degraded version of the proprietary media, the proprietary media must first be obtained. Within the combination, the proprietary media was obtained as taught in Fanning, and is degraded by the manufacturing phase of Hale. While some of the manufactured types may not require the proprietary media (creating a decoy file of white noise, for example), creating a degraded version of the proprietary media does require the proprietary media the decoy can be created. Creating a degraded version of the collected proprietary media is clearly modifying the media.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fanning (U.S. Patent 6,366,907) in view of Hale (U.S. Patent 6,732,180) and Gutberlet (Gutberlet, L., "Peer-to-Peer Computing – A Technology Fad or Fact?", 10/10/2000, pp. 1-16).

Regarding Claim 1,

Fanning discloses a method comprising collecting a digital music file according to a kind of music of the digital music file by searching a network (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); but does not disclose encrypting the collected digital music file with a predetermined key, and redistributing the encrypted digital music file through the network.

Hale, however, discloses preventing reduction of sales amount of records due to a digital music file illegally distributed through a communication network by selecting an illegally produced digital music file, which is derived from a record of a cooperating record corporation, by searching the network (Column 7, line 24 to Column 8, line 37); modifying the digital music file (Column 8, lines 1-37), and redistributing the modified digital music file through the network (Column 8, line 38 to Column 9, line 32). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the rights protection system of Hale into the real-time searching system of Fanning in order to inhibit and deter unauthorized users to proprietary media, while leaving legitimate

files unaffected, thereby rendering the use of media brokering systems ineffective, such that users will be less likely to use such systems for illegal purposes.

Gutberlet, however, discloses encrypting the collected digital music file with a predetermined key and redistributing the encrypted digital music file through the network (Pages 7-8). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the DRM system of Gutberlet into the real-time searching system of Fanning as modified by Hale in order to protect the copyrights of an entity through licensing and distribution of keys, whereby content can be freely distributed, but in order to access said content, one must first obtain the proper key (via payment, for example).

Regarding Claim 2,

Fanning as modified by Hale and Gutberlet discloses the method of claim 1, in addition, Fanning discloses that the collecting is performed by using a popular digital file sharing program (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); and Hale discloses that collections, distributions, and redistributions are performed using a popular digital file sharing program (Column 10, line 42 to Column 11, line 26).

Regarding Claim 3,

Fanning as modified by Hale and Gutberlet discloses the method of claim 1, in addition, Fanning discloses that the collecting is performed by using a popular digital file sharing server (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); and Hale discloses that collections, distributions, and redistributions are performed using a popular digital file sharing server (Column 10, line 42 to Column 11, line 26).

3. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fanning in view of Hale and Gutberlet, further in view of Schneier (Schneier, B., "Applied Cryptography", 1996, pp. 4-5).

Regarding Claim 4,

Fanning as modified by Hale and Gutberlet does not disclose that the collected digital music file is encrypted by a public key encryption algorithm.

Schneier, however, discloses that the collected digital music file is encrypted by a public key encryption algorithm (Pages 4-5). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention ton incorporate the encryption method of Schneier into the real-time searching system of Fanning as modified by Hale and Gutberlet in order to obtain a secure form of encryption, in which only the desired party having the proper private key can decrypt the information being sent.

Regarding Claim 5,

Fanning as modified by Hale and Gutberlet does not disclose that the collected digital music file is encrypted by a public key encryption algorithm.

Schneier, however, discloses that the collected digital music file is encrypted by a public key encryption algorithm (Pages 4-5). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention ton incorporate the encryption method of Schneier into the real-time searching system of Fanning as modified by Hale and Gutberlet in order to obtain a secure form of encryption, in which only the desired party having the proper private key can decrypt the information being sent.

Regarding Claim 6,

Fanning as modified by Hale and Gutberlet does not disclose that the collected digital music file is encrypted by a public key encryption algorithm.

Schneier, however, discloses that the collected digital music file is encrypted by a public key encryption algorithm (Pages 4-5). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention ton incorporate the encryption method of Schneier into the real-time searching system of Fanning as modified by Hale and Gutberlet in order to obtain a secure form of encryption, in which only the desired party having the proper private key can decrypt the information being sent.

4. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fanning in view of Hale and Dittmann (Dittmann et al., "Copyright-Copywrong", 2000, pp. 14-17, obtained from IEEE).

Regarding Claim 7,

Fanning discloses a method comprising collecting a digital music file according to a kind of music of the digital music file by searching a network (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); but does not disclose inserting a watermark containing a predetermined secret information in the collected digital music file and redistributing the watermarked digital music file through the network.

Hale, however, discloses preventing reduction of sales amount of records due to a digital music file illegally distributed through a communication network by selecting an illegally produced digital music file which is derived from a record of a cooperating record company (Column 7, line 24 to Column 8, line 37); modifying the digital music file (Column 8, lines 1-37); and redistributing the modified digital music file through the network (Column 8, line 38 to Column 9, line 32). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the rights protection system of Hale into the real-time searching system of Fanning in order to inhibit and deter unauthorized users to proprietary media, while leaving legitimate files unaffected,

thereby rendering the use of media brokering systems ineffective, such that users will be less likely to use such systems for illegal purposes.

Dittmann, however, discloses inserting a watermark containing a predetermined secret information in the collected digital music file (Pages 14-17). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the watermarking techniques of Dittmann into the real-time searching system of Fanning as modified by Hale in order to more efficiently track the redistributed music files, determine who downloads such redistributed music files, identify and track how the material is being used, and/or to provide additional data that can add value to the material.

Regarding Claim 8,

Fanning as modified by Hale and Dittmann discloses the method of claim 7, in addition, Fanning discloses that the collecting is performed by using a popular digital file sharing program (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); and Hale discloses that collections, distributions, and redistributions are performed using a popular digital file sharing program (Column 10, line 42 to Column 11, line 26).

Regarding Claim 9,

Fanning as modified by Hale and Dittmann discloses the method of claim 7, in addition, Fanning discloses that the collecting is performed by

using a popular digital file sharing server (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); and Hale discloses that collections, distributions, and redistributions are performed using a popular digital file sharing server (Column 10, line 42 to Column 11, line 26).

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fanning in view of Hale and Gutberlet, further in view of Cuckoo ("How To Lay Cuckoo's Eggs", pp. 1-5, 10/18/2000, obtained from http://web.archive.org/web/20001018072441/http://www.hand-2-mouth.com/cuckooegg/resources.htm).

Fanning as modified by Hale and Gutberlet discloses the method of claim 1, in addition, Fanning discloses that collecting the digital music file comprises selecting one of a plurality of digital music files having a having a same name, size, and playing time (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); but may not disclose selecting one of the files having a greatest number of the same file.

Cuckoo, however, discloses collecting one of a plurality of digital music files that has a greatest number of files having the same name, size, and playing time (Pages 1-3). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the Cuckoo Egg creation system of Cuckoo into the real-time searching system of Fanning as modified by Hale

and Gutberlet in order to obtain maximum distribution of the modified files, thereby increasing effectiveness of the system in thwarting illegal uses of content sharing systems, such as P2P.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fanning in view of Hale and Dittmann, further in view of Cuckoo.

Fanning as modified by Hale and Dittmann discloses the method of claim 7, in addition, Fanning discloses that collecting the digital music file comprises selecting one of a plurality of digital music files having a having a same name, size, and playing time (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); but may not disclose selecting one of the files having a greatest number of the same file.

Cuckoo, however, discloses collecting one of a plurality of digital music files that has a greatest number of files having the same name, size, and playing time (Pages 1-3). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the Cuckoo Egg creation system of Cuckoo into the real-time searching system of Fanning as modified by Hale and Dittmann in order to obtain maximum distribution of the modified files, thereby increasing effectiveness of the system in thwarting illegal uses of content sharing systems, such as P2P.

7. Claims 12-14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fanning in view of Hale and Cuckoo.

Regarding Claim 12,

Fanning discloses a method comprising:

Searching a network for a digital music file (Column 3, line 33 to Column 4, line 19);

Identifying a plurality of digital music files that are substantially similar to the digital music file (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); and

Collecting one of the plurality of digital music files that has the same name, size, and playing time (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7);

But does not explicitly disclose modifying the collected file and redistributing the modified file.

Hale, however, discloses preventing reduction of sales amount of records due to a digital music file illegally distributed through a communication network by searching a network for an illegally produced digital music file, which is derived from a record of a cooperating record corporation (Column 6, lines 44-56; and Column 7, lines 24-67); identifying a plurality of digital music files that are substantially similar to the illegally produced digital music file (Column 7, line 24 to Column 8, line 37); selecting one of the plurality of digital music files having the same name,

size, and playing time (Column 7, line 24 to Column 8, line 37); modifying the collected digital music file (Column 8, lines 1-37); and redistributing the modified digital music file through the network (Column 8, line 38 to Column 9, line 32). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the rights protection system of Hale into the real-time searching system of Fanning in order to inhibit and deter unauthorized users to proprietary media, while leaving legitimate files unaffected, thereby rendering the use of media brokering systems ineffective, such that users will be less likely to use such systems for illegal purposes.

Cuckoo, however, discloses collecting one of a plurality of digital music files that has a greatest number of files having the same name, size, and playing time (Pages 1-3). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the Cuckoo Egg creation system of Cuckoo into the real-time searching system of Fanning as modified by Hale in order to obtain maximum distribution of the modified files, thereby increasing effectiveness of the system in thwarting illegal uses of content sharing systems, such as P2P.

Regarding Claim 13,

Fanning as modified by Hale and Cuckoo discloses the method of claim 12, in addition, Fanning discloses that searching the network for the illegally produced digital music file comprises searching the network

according to a kind of music of the digital music file (Column 3, line 33 to Column 4, line 19).

Regarding Claim 14,

Fanning as modified by Hale and Cuckoo discloses the method of claim 12, in addition, Fanning discloses that the collecting and redistributing are performed by using a popular digital file sharing server (Column 3, line 65 to Column 4, line 42; and Column 5, line 46 to Column 6, line 7); and Hale disclose that collections, distributions, and redistributions are performed using a popular digital file sharing server (Column 10, line 42 to Column 11, line 26).

Regarding Claim 18,

Fanning as modified by Hale and Cuckoo discloses the method of claim 12, in addition, Hale discloses that modifying the collected digital music file comprises altering original content of the collected digital music file (Column 8, lines 1-37); and Cuckoo discloses that modifying the collected digital music file comprises altering original content of the collected digital music file (Pages 1-3).

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fanning in view of Hale and Cuckoo, further in view of Gutberlet.

Fanning as modified by Hale and Cuckoo does not explicitly disclose that modifying the collected digital music file comprises encrypting the collected digital music file with a predetermined key.

Gutberlet, however, discloses that modifying the collected digital music file comprises encrypting the collected digital music file with a predetermined key (Pages 7-8, Section 3.1.1). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the DRM system of Gutberlet into the real-time searching system of Fanning as modified by Hale and Cuckoo in order to protect the copyrights of an entity through licensing and distribution of keys, whereby content can be freely distributed, but in order to access said content, one must first obtain the proper key (via payment, for example).

9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fanning in view of Hale, Cuckoo, and Gutberlet, further in view of Schneier.

Fanning as modified by Hale, Cuckoo, and Gutberlet does not disclose that encrypting the collected digital music file comprises encrypting with a public key encryption algorithm.

Schneier, however, discloses that encrypting the collected digital music file comprises encrypting with a public key encryption algorithm (Pages 4-5). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention ton incorporate the encryption method of Schneier into the

real-time searching system of Fanning as modified by Hale, Cuckoo, and Gutberlet in order to obtain a secure form of encryption, in which only the desired party having the proper private key can decrypt the information being sent.

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fanning in view of Hale and Cuckoo, further in view of Dittmann.

Fanning as modified by Hale and Cuckoo does not explicitly disclose inserting a watermark containing a predetermined secret information in the collected digital music file.

Dittmann, however, discloses inserting a watermark containing a predetermined secret information in the collected digital music file (Pages 14-17). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the watermarking techniques of Dittmann into the real-time searching system of Fanning as modified by Hale and Cuckoo in order to more efficiently track the redistributed music files, determine who downloads such redistributed music files, identify and track how the material is being used, and/or to provide additional data that can add value to the material.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey D. Popham whose telephone number is (571)-272-7215. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571)272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeffrey D Popham
Examiner
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2/3/08